

## **ABSTRACT OF THE DISCLOSURE**

The present invention is directed to methods and compositions for use of homologous recombination for directed evolution, gene reassembly, and directed  
5 mutagenesis. One aspect of the present invention relates to methods for use of bacterial conjugative transfer and homologous recombination for directed evolution, gene reassembly, and directed mutagenesis. Another aspect of the present invention relates to compositions for use in or produced by the methods of the present invention, including libraries, archives and databases.

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